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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,715	10/19/2001	Pascal Agin	Q66778	6061

7590 09/09/2004

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EXAMINER

BARNIE, REXFORD N

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/981,715		AGIN, PASCAL	
	Examiner		Art Unit	
	REXFORD N BARNIE		2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

R. Barnie
REXFORD BARNIE
PRIMARY EXAMINER

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/06/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651).

Regarding claim 1, Heinzeman teaches an error protection system for a wireless system wherein channel coding would be used to protect integrity of bits. According to Heinzeman in (see fig. 6 and col. 6), a power coding method can be used under harsh radio condition based on an average BER analysis. Heinzeman fails however to specify time factors or duration when factoring an average measurement.

Minde et al. teaches a speech quality measurement in mobile communication networks based on radio link parameters wherein time frames or duration can be changed based in part on speech quality in (see cols. 6-7).

Bullock teaches a BIT ERROR rate detection system wherein duration of BER can be monitored and regulated in (see cols. 3-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Minde or Bullock into that of

Heinzeiman thus making it possible to control of bits of information efficiently based in part on detected channel quality.

Regarding claim 2, the combination teaches the claimed subject matter in (see col. 6 of Bullock).

Regarding claim 3, The combination teaches the claimed subject matter in (see col. 6 lines 35-36 of Minde).

Claims 4-10 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651) and further in view of Dohi et al. (US Pat# 6,341,224).

Regarding claim 4, the combination fails to teach SIR measurements when determining quality of a communication channel or link. Dohi teaches a power controller for mobile communications system wherein a signal to interference threshold is dynamically moved based on an error rate measurement in (see cols. 4-6) including BER, SIR and FER.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to incorporate the teaching of Dohi into that of the combination thus making it possible to dynamically controlled signal level and its quality.

Regarding claim 5, The combination including Heinzelman et al. teaches being able to use any coding means in (see col. 3) based on channel conditions.

Art Unit: 2643

Regarding claims 6-9, The combination renders the claimed subject matter obvious.

Regarding claim 10, the combination including Minde teaches usage of an exponential factor as a function of time in (see col. 5 lines 22-44 of Minde et al.).

Regarding claims 12-20, the combination teaches monitoring channel control parameters and dynamically making adjustments to improve quality of communication. Upgrading of uplink and downlink parameters to improve communication is well known.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651) and further in view of Dohi et al. (US Pat# 6,341,224) and further in view of Chennakeshu et al. (US Pat# 5,406,593).

Regarding claim 11, The combination fails to teach the claimed subject matter but Chennakeshu et al. teaches a method of estimating a communication channel wherein equations shown in (see cols. 4-8) can be used in determining and improving signal quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chennakeshu et al. into that of the combination thus making it possible to improve signal quality.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is (703)306-2744. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (703) 305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER
REXFORD BARNIE
09/06/04


REXFORD BARNIE
PRIMARY EXAMINER